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PTO-1390 (Rev. 07-2005)
Approved for use through 3/31/2007. OMB 0851-0021
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## ATTORNEY'S DOCKET NUMBER TRANSMITTAL LETTER TO THE UNITED STATES Serie 6421 DESIGNATED/ELECTED OFFICE (DO/EO/US) U.S. APPLICATION NO AIFMING **CONCERNING A SUBMISSION UNDER 35 U.S.C. 371** INTERNATIONAL APPLICATION NO. PRIORITY DATE CLAIMED INTERNATIONAL FILING DATE PCT/FR2004/050702 December 16, 2004 December 22, 2003 TITLE OF INVENTION Air-separation apparatus, integrated air-separation and metal-production apparatus, and method of starting one such air-separation apparatus APPLICANT(S) FOR DO/EO/US L'Air Liquide, Société Anonyme à Directoire et Conseil de Surveillance pour <u>l'Etude et l'Exploitation des Procédés Georges Claude</u> Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). A copy of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). 6. 🔀 An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: 11. 🛛 An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. X A preliminary amendment. An Application Data Sheet under 37 CFR 1.76. A substitute specification. 16. L A power of attorney and/or change of address letter. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825. 18. A second copy of the published International Application under 35 U.S.C. 154(d)(4). 19. A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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| U.S. APPLICATION NO. (I known see 37 CFR 1.5)  Not yet assigned 5 5 5 9 9                                                                                                                                                                                                                                                                                                         |                                         |               | INTERNATIONAL AP                     |         | ATTORNEY'S DOCKET NUMBER Serie 6421 |                |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|---------------|--------------------------------------|---------|-------------------------------------|----------------|--|
| 20. Other items or information:                                                                                                                                                                                                                                                                                                                                                   |                                         |               |                                      |         |                                     |                |  |
| Inter                                                                                                                                                                                                                                                                                                                                                                             | national Se                             | earch Repo    | rt                                   |         |                                     |                |  |
| The follow                                                                                                                                                                                                                                                                                                                                                                        | ving fees have b                        | een submitted |                                      |         | CALCULATIONS                        | PTO USE ONLY   |  |
| 21. X Basic                                                                                                                                                                                                                                                                                                                                                                       | 1. Sasic national fee (37 CFR 1.492(a)) |               |                                      | \$300   | \$ 300                              | )              |  |
| 22. X Examination fee (37 CFR 1.492(c))                                                                                                                                                                                                                                                                                                                                           |                                         |               |                                      |         |                                     |                |  |
| If the written opinio<br>by IPEAUS<br>All other situations                                                                                                                                                                                                                                                                                                                        | S indicates all cl                      | \$ 200        | )                                    |         |                                     |                |  |
| 23. Search fee (37 CFR 1.492(b))  If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)\$0  Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority                           |                                         |               |                                      |         | \$                                  |                |  |
| All other situations.                                                                                                                                                                                                                                                                                                                                                             | All other situations\$500               |               |                                      |         |                                     | )              |  |
| TOTAL OF 21, 22 and 23 =                                                                                                                                                                                                                                                                                                                                                          |                                         |               |                                      |         | 1,000                               | )              |  |
| Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)).  The fee is \$250 for each additional 50 sheets of paper or fraction thereof.  Total Sheets Extra Sheets Number of each additional 50 or fraction RATE |                                         |               |                                      |         | _                                   |                |  |
|                                                                                                                                                                                                                                                                                                                                                                                   |                                         |               | thereof (round up to a whole number) |         | 1 ,                                 |                |  |
| 11 - 100 = 0 /50 = 0 x \$250  Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration                                                                                                                                                                                                                                             |                                         |               |                                      |         | \$ 130                              |                |  |
| after the date of commencement of the national stage (37 CFR 1.492(h)).  CLAIMS NUMBER FILED NUMBER EXTRA RATE                                                                                                                                                                                                                                                                    |                                         |               |                                      |         | <del> </del>                        | <u> </u>       |  |
| CLAIMS Total claims                                                                                                                                                                                                                                                                                                                                                               |                                         |               | NUMBER EXTRA                         | x \$ 50 | \$                                  |                |  |
|                                                                                                                                                                                                                                                                                                                                                                                   | 10                                      | -3=           | 0                                    | x \$200 | <u> </u>                            |                |  |
| Independent claims 2                                                                                                                                                                                                                                                                                                                                                              |                                         |               |                                      |         | \$ (                                | <del>'  </del> |  |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$360  TOTAL OF ABOVE CALCULATIONS =                                                                                                                                                                                                                                                                                                |                                         |               |                                      |         | s                                   |                |  |
| Applicant claim                                                                                                                                                                                                                                                                                                                                                                   | ns small entity st                      | 3             | _                                    |         |                                     |                |  |
| Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.  SUBTOTAL =                                                                                                                                                                                                                                                                                   |                                         |               |                                      |         | \$                                  | +              |  |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).                                                                                                                                                                                                                                 |                                         |               |                                      |         | \$                                  |                |  |
| Gained phonty dat                                                                                                                                                                                                                                                                                                                                                                 | C (37 OFR 1.492                         | s             |                                      |         |                                     |                |  |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +                                                                                                                                                                                                          |                                         |               |                                      |         | s                                   |                |  |
| by an appropriate C                                                                                                                                                                                                                                                                                                                                                               | MAGI SHERF (3)                          | \$            |                                      |         |                                     |                |  |
| TOTAL FEES ENCLOSED =                                                                                                                                                                                                                                                                                                                                                             |                                         |               |                                      |         | Amount to be refunded:              | \$             |  |
|                                                                                                                                                                                                                                                                                                                                                                                   |                                         |               |                                      |         | Amount to be charged                | \$ 1,130.00    |  |

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| c. X  The Commissioner is hereby authorized to charge any Account No. 01-1375. A duplicate copy of this should be copy of the should | formation on this form may become public. Credit card information should not |  |  |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|--|--|--|--|--|
| NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                              |  |  |  |  |  |
| SEND ALL CORRESPONDENCE TO:  Elwood Haynes IP Dept. Air Liquide 2700 Post Oak Blvd., Suite 1800 Houston, TX 77056                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | SIGNATURE Elwood Haynes NAME 55,254 REGISTRATION NUMBER                      |  |  |  |  |  |

## IAPZO RCC'C PCT/PTO 20 JUN 2006 IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

Not yet assigned

Applicants:

Jean-Jacques CHOLLAT, et al.

Filed Internationally:

December 16, 2004

US National:

Herewith

Title:

AIR-SEPARATION APPARATUS, INTEGRATED AIR-

SEPARATION AND METAL-PRODUCTION APPARATUS, AND

METHOD OF STARTING ONE SUCH AIR-SEPARATION

**APPARATUS** 

TC/A.U:

Unknown

Examiner:

Unknown

Docket No.:

**Serie 6421** 

Customer No.:

000040582

## **CERTIFICATE OF MAILING BY EXPRESS MAIL**

Mail Stop Patent Application Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

I hereby certify that the following documents, which are attached, are being deposited, under 37 CFR 1.10, with the United States Postal Service "Express Mail Post Office to Addressee" service as **Express Mail No. EV 856933800 US** in an envelope addressed to: Mail Stop Patent Application, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450, on **June 20, 2006**.

- A copy of International Publication WO 2005/064251;
- 2. English translation of International Application PCT/FR2004/050702;
- Preliminary Amendment;
- 4. IDS and Form 1449, including search report with 1 reference;
- 5. Transmittal Under 35 USC 371 (PTO Form 1390) Fee Sheet (in duplicate); and
- 6. Postcard.

Respectfully submitted,

Diana Guzman

Date: June 20, 2006

Air Liquide 2700 Post Oak Boulevard, Suite 1800 Houston, Texas 77056 (713) 624-8973